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(FILE 'HOME' ENTERED AT 10:31:35 ON 24 SEP 1999)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE' ENTERED AT 10:33:53 ON 24 SEP 1999

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L1             0 S [LMYPT]...[LK]
L2             3 S LMYPT
L3             0 S L2 AND CANCER
L4             0 S MYPTY
L5             0 S QWAVGHL
L6             0 S QWAV
L7             0 S MQWF
L8             0 S LMYPTY
L9             0 S LMYPY
L10            3 S LMYPT
                 E MUKHERJEE R/AU
                 E JAGGI M/AU
                 E PRASAD S/AU
L11            0 S BURMAN/AU
L12         1025 S E1-E12
                 E MUKHERJEE R/AU
L13          823 S E1-E12
                 E JAGGI M/AU
L14           89 S E1-E12
L15         1933 S L12 OR L13 OR L14
L16           43 S L15 AND CANCER
L17       133978 S SOMATOSTATIN OR BOMEBESIN OR (SUBSTANCE (3A) "P")
L18            3 S L16 AND L17
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=> d l18 1-3 all

L18 ANSWER 1 OF 3 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
AN 1999212114 EMBASE
TI Antiproliferative and GH-inhibitory activity of chimeric peptides consisting of GHRP-6 and **somatostatin**.
AU Dasgupta P.; Singh A.T.; **Mukherjee R.**
CS R. Mukherjee, Dabur Research Foundation, 22, Site IV, Sahibabad, Ghaziabad
201 010, Uttar Pradesh, India. Dabur@giasdil01.vsnl.net.in
SO Biochemical and Biophysical Research Communications, (7 Jun 1999) 259/2 (379-384).
Refs: 23
ISSN: 0006-291X CODEN: BBRCA
CY United States
DT Journal; Article
FS 003 Endocrinology
029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LA English
SL English
AB Chimeric peptides consisting of growth hormone releasing peptide (GHRP-6) linked to **somatostatin** (6-11) via an amide bond to provide the effector parts of both the peptides were synthesized. The antiproliferative, cytotoxic, and GH-inhibitory activities of these

chimeric peptides were determined in vitro in the rat pituitary adenoma cell line GH3. [redacted] of the chimeric peptides, GSD exhibited significantly greater ($p < 0.001$) anti-neoplastic and GH-inhibitory activity, as compared to RC-160. The hybrid peptides displayed high affinity binding to **somatostatin** receptors on GH3 cells. The bioactivity of GSD was found to be mediated by the stimulation of tyrosine phosphatase, involving a cGMP-dependent pathway, through pertusis toxin-sensitive G-proteins. Such potent GH-inhibitory chimeric peptides may be of potential importance in the therapy of acromegaly, as well as provide novel tools to study the regulation of GH secretion by GHRP and **somatostatin**.

CT Medical Descriptors:
*cell proliferation
hypophysis adenoma
cancer cell culture
cytotoxicity
antineoplastic activity
receptor affinity
acromegaly: TH, therapy
cell strain gh3
growth hormone release
nonhuman
rat
controlled study
animal cell
article
priority journal
Drug Descriptors:
*growth hormone: EC, endogenous compound
***somatostatin: CM, drug comparison**
***somatostatin: PD, pharmacology**
*histidyl dextro tryptophylalanyltryptophyl dextro phenylalanyllysinamide: CM, drug comparison
*histidyl dextro tryptophylalanyltryptophyl dextro phenylalanyllysinamide: PD, pharmacology
peptide: CM, drug comparison
peptide: PD, pharmacology
amide
vapreotide: CM, drug comparison
vapreotide: PD, pharmacology
somatostatin receptor: EC, endogenous compound
chimeric protein: CM, drug comparison
chimeric protein: PD, pharmacology
phosphatase: EC, endogenous compound
cyclic GMP: EC, endogenous compound
guanine nucleotide binding protein: EC, endogenous compound
pertussis toxin

RN (growth hormone) 36992-73-1, 37267-05-3, 66419-50-9, 9002-72-6; (**somatostatin**) 38916-34-6, 51110-01-1; (histidyl dextro tryptophylalanyltryptophyl dextro phenylalanyllysinamide) 87616-84-0; (amide) 17655-31-1; (vapreotide) 103222-11-3; (phosphatase) 9013-05-2; (cyclic GMP) 7665-99-8; (pertussis toxin) 70323-44-3

CN Rc 160

L18 ANSWER 2 OF 3 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
AN 94159380 EMBASE
DN 1994159380
TI Neuropeptides: A link between nervous, immune and endocrine systems.
AU **Jaggi M.**
CS National Institute of Immunology, Jeet Singh Marg,New Delhi 110 067, India

SO Indian Drugs, (1994) 31/2 (44-50).
ISSN: 0019-462X CODEN: INDRBA
CY India
DT Journal; General Review
FS 008 Neurology and Neurosurgery
026 Immunology, Serology and Transplantation
029 Clinical Biochemistry
037 Drug Literature Index
LA English
CT Medical Descriptors:
*immunomodulation
*neurotransmission
cancer
human
nonhuman
review
stress
Drug Descriptors:
*neuropeptide
beta endorphin
bombesin
corticotropin
enkephalin
neurotensin
oxytocin
prolactin
somatostatin
substance p
vasoactive intestinal polypeptide
vasopressin
RN (beta endorphin) 59887-17-1; (bombesin) 31362-50-2; (corticotropin) 11136-52-0, 9002-60-2, 9061-27-2; (neurotensin) 39379-15-2; (oxytocin) 50-56-6, 54577-94-5; (prolactin) 12585-34-1, 50647-00-2, 9002-62-4; (**somatostatin**) 38916-34-6, 51110-01-1; (**substance p**) 33507-63-0; (vasoactive intestinal polypeptide) 37221-79-7; (vasopressin) 11000-17-2

L18 ANSWER 3 OF 3 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
AN 94146352 EMBASE
DN 1994146352
TI New sensitive and specific ELISA for the detection of neuropeptides in culture supernatants.
AU **Jaggi M.; Mukherjee R.**
CS Microbiology Division, National Institute of Immunology, Aruna Asaf Ali Marg,New Delhi - 110 067, India
SO Journal of Immunoassay, (1994) 15/2 (129-146).
ISSN: 0197-1522 CODEN: JOUIDK
CY United States
DT Journal; Article
FS 003 Endocrinology
026 Immunology, Serology and Transplantation
LA English
SL English
AB Accurate and sensitive sandwich ELISA has been developed for the detection
and identification of each of the three neuropeptides, namely, Vasoactive intestinal peptide, **Somatostatin** and **Substance P**. The neuropeptides conjugated with BSA and emulsified with Freund's adjuvant were used for immunisation of rabbits. Titres of polyclonal antibodies were checked by indirect immunofluorescence. The animals were bled when titres were high, sera separated, complement inactivated and IgG class of antibodies were purified using a protein G column. Purified IgG antibodies were used for coating the wells and for conjugation with HRPO and used for the detection of the synthetic neuropeptides in a standard solution or in the culture supernatant. The

ELISA thus developed for the assay of each of the three neuropeptides had a sensitivity ([illegible]01 ng - 12.8 ng / ml) equal to [illegible] better than that reported for these peptides by radioimmunoassay. The assay was highly specific and did not react with a panel of other neuropeptides tested. High level of sensitivity without compromising the specificity was achieved by using activated polyvinyl plates and using purified IgG from high titre rabbit anti-peptide sera. The non specific reaction was minimised by using 10,000 MW cut off amicon filtered supernatants.

CT Medical Descriptors:
*enzyme linked immunosorbent assay
animal cell
article
brain cell
cancer cell culture
hormone determination
human
human cell
immunofluorescence test
neurochemistry
nonhuman
peptide analysis
rat
spleen cell
supernatant
Drug Descriptors:
***somatostatin**
***substance p**
*vasoactive intestinal polypeptide
bovine serum albumin
freund adjuvant

RN (**somatostatin**) 38916-34-6, 51110-01-1; (**substance p**) 33507-63-0; (vasoactive intestinal polypeptide) 37221-79-7; (freund adjuvant) 9007-81-2

=> d l2 1-3 all

L2 ANSWER 1 OF 3 MEDLINE
AN 94158978 MEDLINE
DN 94158978
TI Cloning and characterization of a Golgi-associated GTP-binding protein homologue from Leishmania major.
AU Cappai R; Osborn A H; Gleeson P A; Handman E
CS Walter and Eliza Hall Institute of Medical Research, Royal Melbourne Hospital, Victoria, Australia.
NC AI-19347 (NIAID)
SO MOLECULAR AND BIOCHEMICAL PARASITOLOGY, (1993 Nov) 62 (1) 73-82. Journal code: NOR. ISSN: 0166-6851.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-L12031
EM 199406
AB This paper describes the cloning of a Golgi-associated GTP-binding protein homologue from Leishmania major. The gene was isolated using degenerate oligonucleotides to conserved sequences amongst the small GTP-binding proteins in a polymerase chain reaction on genomic DNA of the L. major cloned line V121. The reading frame of one clone showed high similarity to the rab/YPT subfamily of small GTP-binding proteins. A full length copy of the gene was isolated from a lambda gt10 V121 genomic library and sequenced. At the amino acid level the gene showed highest similarity to the human/rat rab1 A gene and the mouse/yeast YPT gene and was named **LmYPT**. The **LmYPT** gene was present as a single copy gene in both the L. major and L. donovani genomes. Karyotype analysis localized the **LmYPT** gene to chromosome band 18 in V121, but it was located on a larger chromosome in the different L. major isolate L119. The **LmYPT** gene was transcribed as a 3.9-kb transcript in both the promastigote and amastigote forms of the parasite. Western blot analysis, using a polyclonal rabbit antiserum raised against an Escherichia coli expressed portion of the molecule, identified a doublet at 20 and 23 kDa in total promastigote protein. Immunoelectron microscopy in combination with peroxidase staining localized the **LmYPT** molecule to the Leishmania Golgi apparatus.
CT Check Tags: Animal; Comparative Study; Human; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
Amino Acid Sequence
Base Sequence
Cloning, Molecular
DNA, Protozoan: GE, genetics
*G-Proteins: GE, genetics
G-Proteins: ME, metabolism
Genes, Protozoan
Golgi Apparatus: ME, metabolism
Immunohistochemistry
*Leishmania major: GE, genetics
Leishmania major: ME, metabolism
Leishmania major: UL, ultrastructure

Mice
Microscopy, Immunoelectron
Molecular Sequence Data
*Protozoan Proteins: GE, genetics
Protozoan Proteins: ME, metabolism
Rats
Sequence Homology, Amino Acid
Species Specificity
CN 0 (DNA, Protozoan); 0 (G-Proteins); 0 (Protozoan Proteins)
GEN **LmYPT**

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 1999 ACS
AN 1994:126461 CAPLUS
DN 120:126461
TI Cloning and characterization of a Golgi-associated GTP-binding protein homolog from Leishmania major
AU Cappai, Roberto; Osborn, Amelia H.; Gleeson, Paul A.; Handman, Emanuela
CS Walter and Eliza Hall Inst. Med. Res., Melbourne, 3050, Australia
SO Mol. Biochem. Parasitol. (1993), 62(1), 73-82
CODEN: MBIPDP; ISSN: 0166-6851
DT Journal
LA English
CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 6, 10
AB This paper describes the cloning of a Golgi-assocd. GTP-binding protein homolog from Leishmania major. The gene was isolated using degenerate oligonucleotides to conserved sequences among the small GTP-binding proteins in a polymerase chain reaction on genomic DNA of the L. major cloned line V121. The reading frame of one clone showed high similarity to the rab/YPT subfamily of small GTP-binding proteins. A full length copy of the gene was isolated from a .lambda.gt10 V121 genomic library and sequenced. At the amino acid level the gene showed highest similarity to the human/rat rab1A gene and the mouse/yeast YPT gene and was named **LmYPT**. The **LmYPT** gene was present as a single copy gene in both the L. major and L. donovani genomes. Karyotype anal. localized the **LmYPT** gene to chromosome band 18 in V121, but it was located on a larger chromosome in the different L. major isolate L119. The **LmYPT** gene was transcribed as a 3.9-kb transcript in both the promastigote and amastigote forms of the parasite. Western blot anal., using a polyclonal rabbit antiserum raised against an Escherichia coli expressed portion of the mol., identified a doublet at 20 and 23 kDa in total promastigote protein. Immunoelectron microscopy in combination with peroxidase staining localized the **LmYPT** mol. to the Leishmania Golgi app.
ST GTP binding protein homolog sequence Leishmania
IT Golgi apparatus
(GTP-binding protein homolog of Leishmania major assocd. with, gene sequence for)
IT Leishmania major
(Golgi-assocd. GTP-binding protein homolog of, gene sequence for)
IT Chromosome
(Leishmania major 18, gene **LmYPT** for Golgi-assocd. GTP-binding protein homolog mapping to)
IT Gene, microbial
RL: BIOL (Biological study)
(**LmYPT**, for Golgi-assocd. GTP-binding protein homolog of Leishmania major, sequence for)
IT Deoxyribonucleic acid sequences
(of GTP-binding protein homolog gene **LmYPT**, of Leishmania major V121)
IT Protein sequences
(of GTP-binding protein homolog of Leishmania major V121)
IT Genetic mapping

(of gene **LmYPT** for Golgi-assocd. GTP-binding protein homolog to chromosome 18 of Leishmania major V121)

IT Gene, animal
RL: BIOL (Biological study)
(rab1A, of human and rat, sequence similarity to Golgi-assocd. GTP-binding protein homolog of Leishmania major)

IT Gene, microbial
RL: BIOL (Biological study)
(YPT1, of yeast, sequence similarity to Golgi-assocd. GTP-binding protein homolog of Leishmania major)

IT Gene, animal
RL: BIOL (Biological study)
(ypt1, of mouse, sequence similarity to Golgi-assocd. GTP-binding protein homolog of Leishmania major)

IT 152990-27-7, GTP-binding protein homolog (Leishmania major clone line V121
Golgi-assocd.)
RL: PRP (Properties)
(amino acid sequence of)

IT 151116-71-1
RL: BIOL (Biological study); PRP (Properties)
(nucleotide sequence of)

L2 ANSWER 3 OF 3 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1994:77466 BIOSIS
DN PREV199497090466
TI Cloning and characterization of a Golgi-associated GTP-binding protein homologue from Leishmania major.
AU Cappai, Roberto; Osborn, Amelia H.; Gleeson, Paul A.; Handman, Emanuela (1)
CS (1) Walter and Eliza Hall Inst., Inst. Med. Res., Post Office, Royal Melbourne Hosp., VIC 3050 Australia
SO Molecular and Biochemical Parasitology, (1993) Vol. 62, No. 1, pp. 73-82.
ISSN: 0166-6851.
DT Article
LA English
AB This paper describes the cloning of a Golgi-associated GTP-binding protein homologue from Leishmania major. The gene was isolated using degenerate oligonucleotides to conserved sequences amongst the small GTP-binding proteins in a polymerase chain reaction on genomic DNA of the L. major cloned line VI 21. The reading frame of one clone showed high similarity to the rab/YPT subfamily of small GTP-binding proteins. A full length copy of the gene was isolated from a lambda-gt10 VI 21 genomic library and sequenced. At the amino acid level the gene showed highest similarity to the human/rat rab1A gene and the mouse/yeast YPT gene and was named Lm YPT. The Lm YPT gene was present as a single copy gene in both the L. major and L. donovani genomes. Karyotype analysis localized the Lm YPT gene to chromosome band 18 in V121, but it was located on a larger chromosome in the different L. major isolate L119. The Lm YPT gene was transcribed as a 3.9-kb transcript in both the promastigote and amastigote forms of the parasite. Western blot analysis, using a polyclonal rabbit antiserum raised against an Escherichia coli expressed portion of the molecule, identified a doublet at 20 and 23 kDa in total promastigote protein. Immunoelectron microscopy in combination with peroxidase staining localized the **LmYPT** molecule to the Leishmania Golgi apparatus.
CC Cytology and Cytochemistry - Animal *02506
Genetics and Cytogenetics - Animal *03506
Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
Biochemical Studies - Proteins, Peptides and Amino Acids *10064
Biophysics - Molecular Properties and Macromolecules *10506

Biophysics - Membrane Phenomena *10508
Invertebrata, Comparative and Experimental Morphology, Physiology and Pathology - Protozoa *64002
BC Flagellata *35200
IT Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Genetics; Membranes (Cell Biology); Physiology
IT Chemicals & Biochemicals
GENBANK-L12031
IT Sequence Data
amino acid sequence; molecular sequence data; nucleotide sequence; GENBANK-L12031
IT Miscellaneous Descriptors
POLYMERASE CHAIN REACTION
ORGN Super Taxa
Flagellata: Invertebrata, Protozoa, Animalia
ORGN Organism Name
Leishmania donovani (Flagellata); Leishmania major (Flagellata)
ORGN Organism Superterms
animals; invertebrates; microorganisms; protozoans
RN 151116-71-1 (GENBANK-L12031)

=> D HIS

(FILE 'HOME' ENTERED AT 10:31:35 ON 24 SEP 1999)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE' ENTERED AT 10:33:53 ON 24 SEP 1999

L1 0 S [LMYPT]...[LK]
L2 3 S LMYPT
L3 0 S L2 AND CANCER
L4 0 S MYPTY
L5 0 S QWAVGHL
L6 0 S QWAV
L7 0 S MQWF